Architectural Overview

INSIGHT Remote Monitoring Platform

The INSIGHT platform provides remote environmental monitoring, data logging, and system auditing. Anywhere you have access to the Internet through a computer or a smart device, you can receive E-mail and text alerts, securely monitor your environment, manage your sensors, and generate reports. The Winland Electronics remote monitoring solution protects data security, integrity, and privacy with a proprietary, encrypted data protocol and secure socket layer (SSL) data traffic.

The INSIGHT user interface is divided into the following functional areas represented by the corresponding menu tabs:

- **Dashboard**—Shows status-at-a-glance for all EA800-ip devices on an account, plus access to sensor detail and geographic location for a selected device.

- **Reports**—Creates and schedules reports containing information for selected time periods from sensor logs and device alert logs.

- **Account Administration**—Manages the INSIGHT environment configuration including customer accounts, user IDs, EA800-ip devices, sensors, and locations.

- **Profiles**—Creates and manages profiles that specify notification and remedial actions to perform in the event of a sensor alert.

Summary

INSIGHT is a software-as-a-service (SaaS) platform that is built on the Microsoft® Cloud product known as Azure:

- EA800-ip devices connect to the INSIGHT platform through the Hypertext Transfer Protocol Secure (HTTPS) protocol (port 443)

- EA800-ip devices establish only outbound communications with the INSIGHT platform and do not accept inbound connections.

- INSIGHT supports the Dynamic Host Configuration Protocol (DHCP) and the static IP method for acquiring IP addresses.

- INSIGHT resides on a remote server and runs on a computer or smart device through an Internet browser

- INSIGHT access is authenticated by user ID and password with lockout protection.

INSIGHT Network Diagram

The INSIGHT platform communicates through the Microsoft Cloud with users on computers and mobile devices (INSIGHT Web Services) and with EA800-ip devices (INSIGHT Device Services). Environment constructs and data are maintained in the INSIGHT Database.
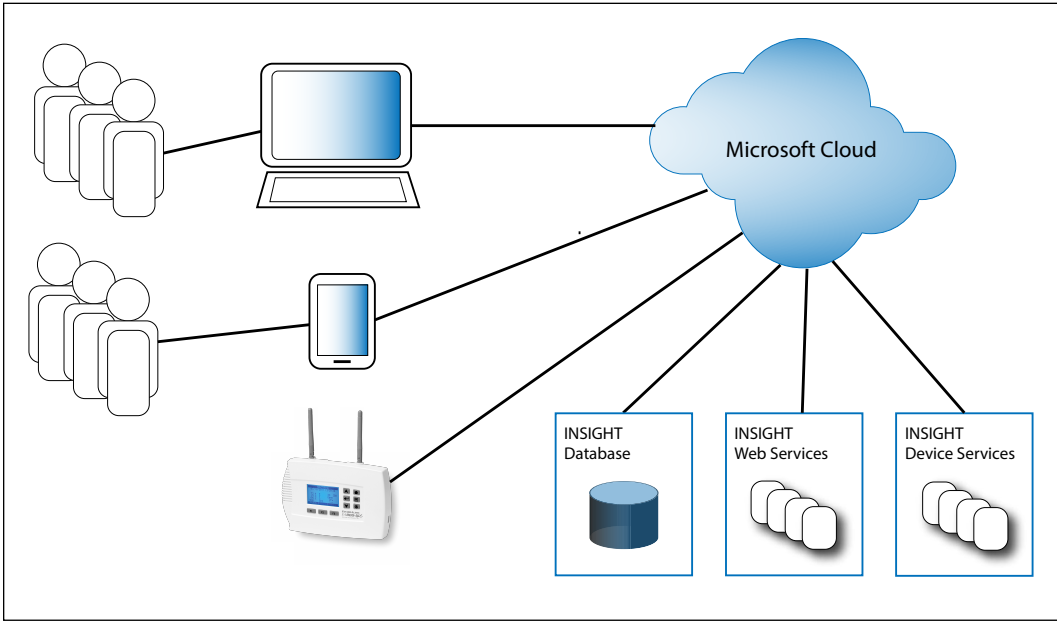
Network Protocols

The INSIGHT platform supports the following network protocols:

Protocol Type	Protocols
Encryption	Transport Layer Security (TLS) 1.2
Communication	HTTPS
IP Addressing	DHCP, Static IP
Packet Size	< 5kB
Network Connection	Ethernet cable 10/100 - see User's Guide

System Requirements

INSIGHT is a web-based platform that is available on a host server and can run on any device that supports an Internet browser, such as a desktop or laptop computer, tablet, or smartphone.

Supported Internet Browsers

INSIGHT supports the following Internet browsers (the lastest version is recommended):

- Google Chrome™, version 20 or later
- Opera Browser™, version 12.10 or later
- Mozilla® Firefox®, version 19 or later
- Microsoft Internet Explorer®, version 11
- Microsoft Edge™, all versions
- Apple® Safari®, version 8.0 or later

Supported Mobile Devices

INSIGHT supports the following mobile devices:

- Apple mobile devices, latest version
- Android™ mobile devices, latest version

EA800-ip

THE WINLAND SOLUTION

INSIGHT

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